LDEO LAB SAFETY GRAM

7/10/2014 Recently, a hazardous waste container nearly burst in an occupied lab on campus. Lab personnel mixed incompatible chemical wastes into the container (adding concentrated nitric acid to a waste mixture which also contained isopropyl alcohol). Fortunately, the lab PI who happened to be in the lab noticed the bulging, deformed waste container and took corrective actions to prevent a potentially dangerous situation from occurring. This situation is particularly concerning as the lab had developed lab specific safety rules for personnel and all personnel had just completed a training session devoted on these procedures.

LESSONS LEARNED:

- The PI is responsible for ensuring that employees and students perform only those tasks for which they are qualified by training and experience. (NOTE: Undergraduates should never be in a lab containing hazardous chemicals without proper supervision.) Laboratory hands on training should supplement classroom type training to ensure that personnel understand lab procedures.
- All persons that generate chemical waste must understand what other wastes produced in that lab are incompatible and not mix such wastes.
- If lab persons are unsure as to what chemical waste is incompatible with other wastes being stored in the lab they must check with their supervisor/PI before proceeding.

<u>Important safety procedures worth reiterating as a result of this incident:</u>

- Lab specific procedures should be developed by the PI or lab manager that include what chemical wastes may and may not be mixed.
- All chemicals added to a waste container need to be clearly written on the hazardous waste label; no chemical abbreviations/formulas.
- If you notice that a waste container is bulging, you should contact supervision/PI immediately; Do not rely on an e-mail. If lab supervision is not available, contact LDEO Safety Office by dialing 845.359.2900.
- Proper personal protective equipment (PPE) needs to be worn in the lab. (This minimally includes a lab coat, long pants/skirt, closed toe shoes, safety glasses. Additionally, gloves whenever chemicals are being handled.)